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F4R RMR R321 R34Y R417 R470

(56) Documents Cited

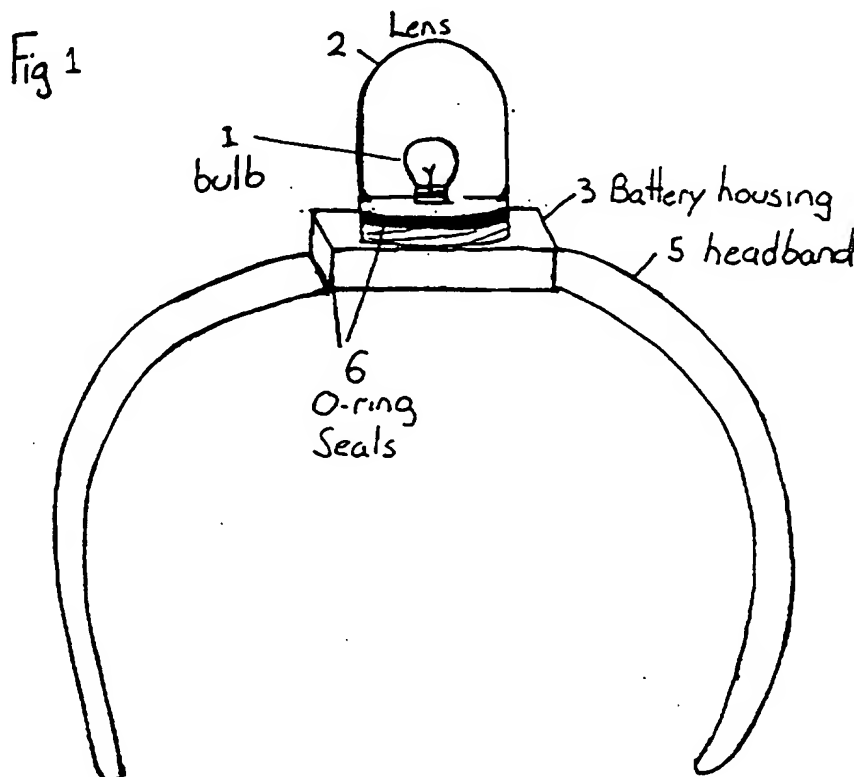
GB 0582547 A US 4665568 A US 3963917 A
US 3749902 A
WPI abstract 1999-090330 & JP100325011A
WPI abstract 1999-211315 & JP110050322A

(58) Field of Search

UK CL (Edition Q) F4R
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ONLINE: WPI, EPODOC, JAPIO

(54) Abstract Title
Warning light attached to the head

(57) A warning light comprising a bulb 1 and lens 2 is attached to the top of a person's head eg by a headband 5 so as to provide uninterrupted visibility around the user without interfering with the user's night vision. The light should be waterproof and either mounted on a battery housing 3 or connected thereto by wiring (8, fig 2). The light may flash and have multicoloured lenses. It is useful for the occupants of small boats.



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Fig 1

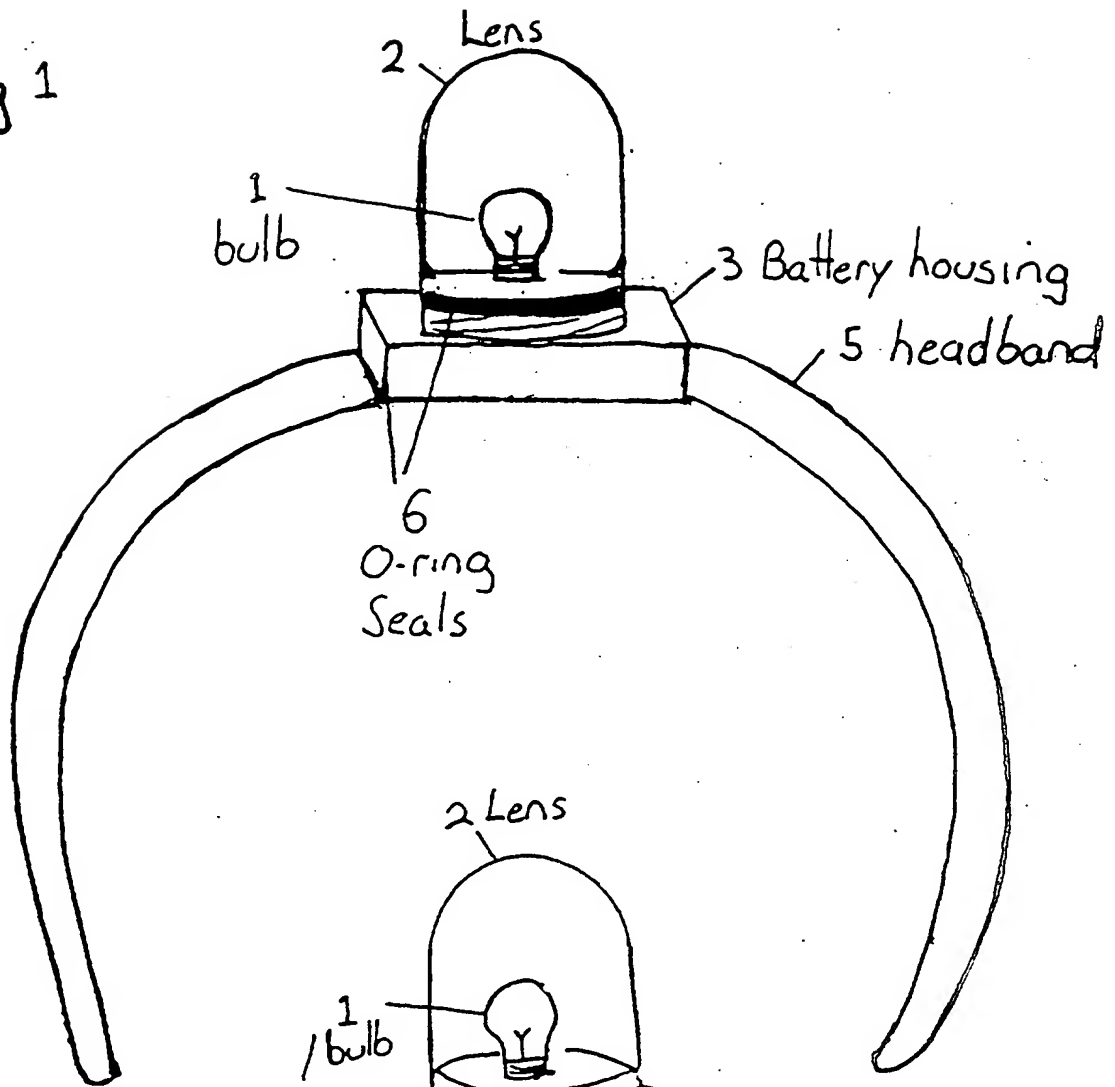


Fig 2

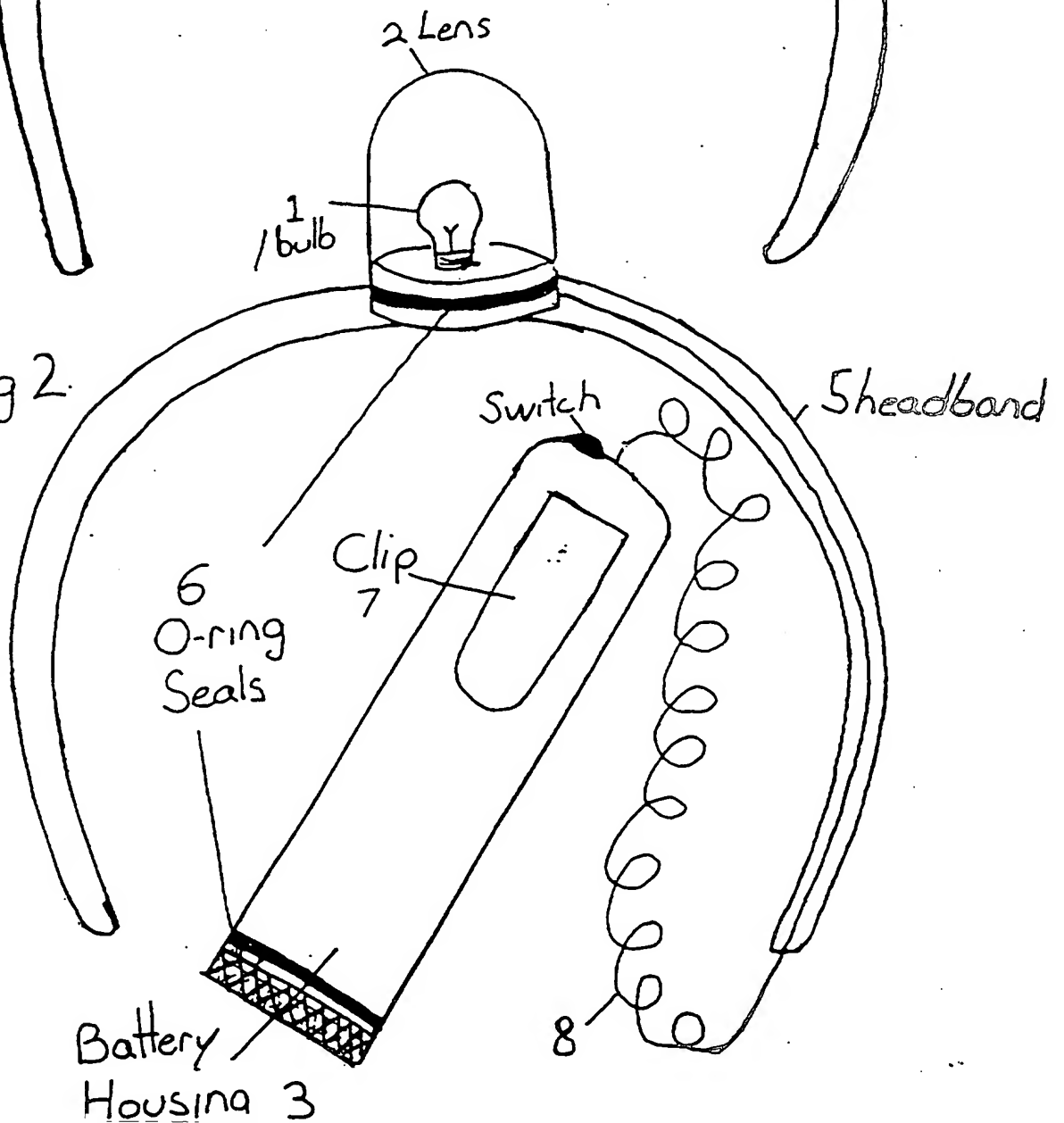


Fig 3

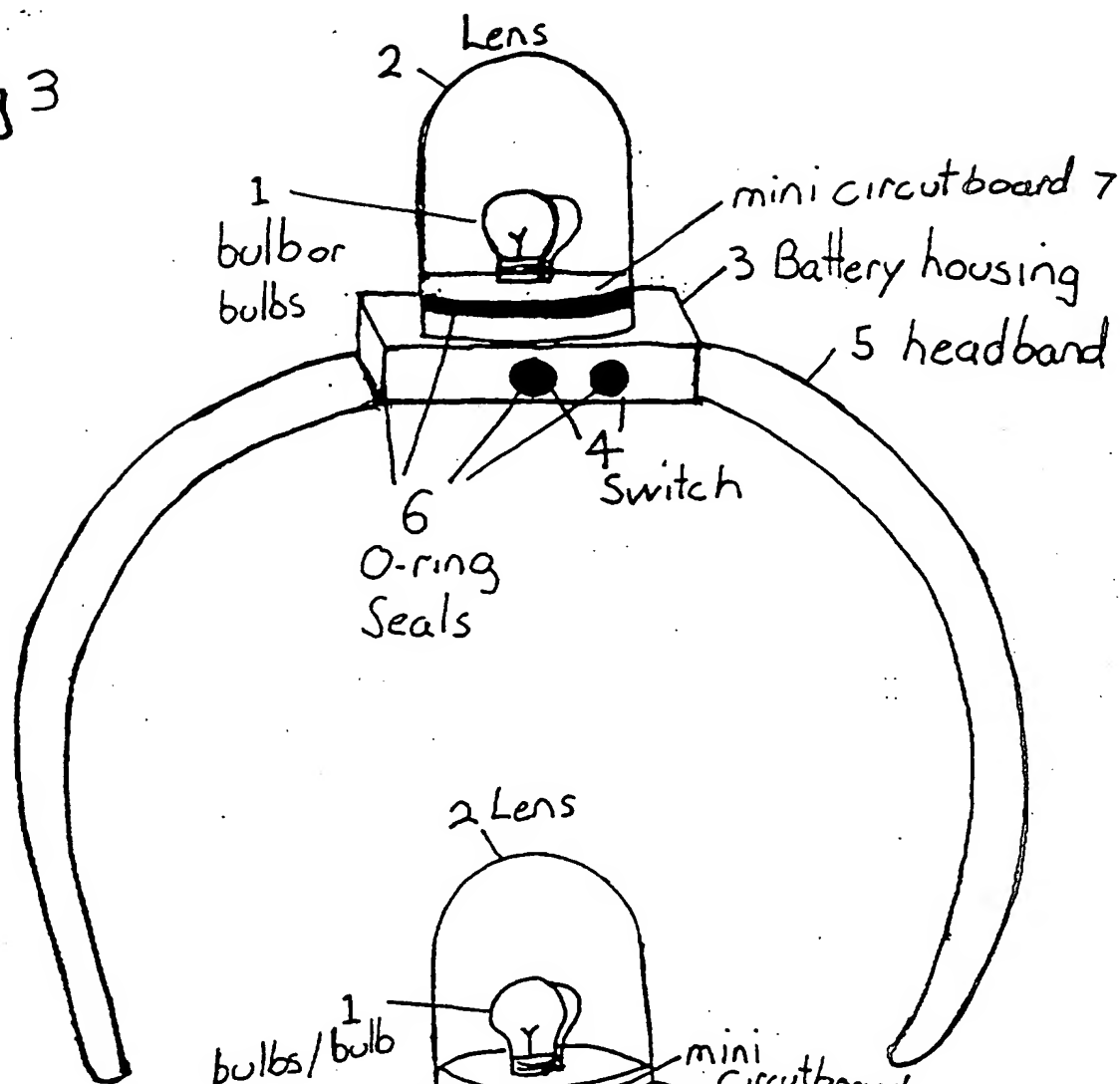
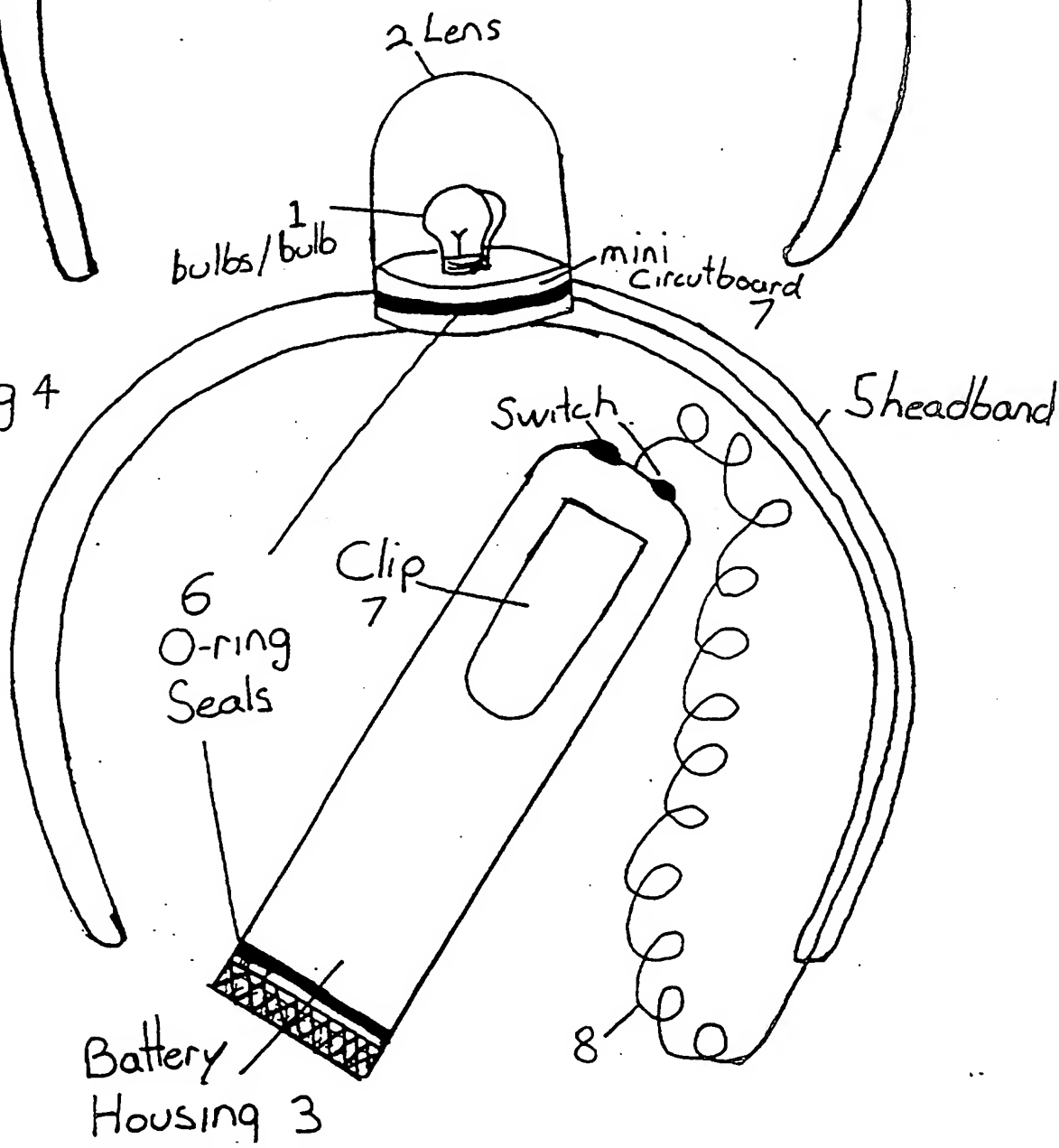


Fig 4



DESCRIPTION

DINGHY HEAD LIGHT

This invention relates to a light that when worn upon the users head is an aid for the prevention of collision whilst upon the water .

At present , lights for use in navigation are usually permanently or temporarily attached to the craft . In small craft such as dinghies or canoes a light with all round visibility is usually placed where convenient . This has two disadvantages : a) The light is interrupted in one direction due to the users body blocking it . b) the users night vision is significantly reduced every time the user has to look in the direction the light is placed .

Or a flashlight is carried and shone in the direction another craft is heard , to alert them of your presence . This also has disadvantages : a) an intense beam reflecting off parts of the boat reduces night vision once again . b) if the other vessel is under sail you may not hear it until too late . c) If your hands are occupied in rowing or paddling you must stop propelling your vessel each time you wish to shine your flashlight , which is inconvenient and if you find yourself in a position of imminent collision your reaction time to manoeuvre your vessel out of harms way is significantly reduced, for , instead of holding on to your means of propulsion , you are holding a flashlight .

The purpose of this invention is to provide a light , that when worn on the head provides light with an uninterrupted visibility 360 degrees around the user and his craft without interfering with either the users night vision or his means of propulsion .

The dingy head light is a light weight lighting device worn upon the head , that in conditions of darkness lets other people know where the location of the person wearing the device is .

The preferred embodiments of the invention will now be described with reference to the accompanying drawings.

Figure 1 Version A

A light bulb or a light emitting diode/diodes supplying continuous or flashing light (1) is encased in a clear, coloured or multi coloured lens (2) that is mounted on a battery housing (3) turning the lens cap on its thread switches the light on by closing electrical contacts. Lighting assembly (1,2,3) is attached to, or is an integral moulded part of, a flexible headband (5) The lens, battery housing and switch are waterproofed using O-rings or other seals (6).

Figure 2 Version B

A light bulb or light emitting diode/diodes supplying continuous or flashing light (1) is encased in a clear, coloured or multi coloured lens (2) which is attached to a base that is attached to, or is an integral moulded part of, a flexible headband (5) this is connected to a remote battery housing / switch assembly (3) by wiring (8). A clip (7) enables the user to attach it to an item of clothing or other suitable area. The lens, battery housing and switch are waterproofed using O-rings or other seals (6).

Figure 3 Version C

Light bulbs or light emitting diodes supplying continuous or flashing light or both simultaneously (1) are encased in a clear, coloured or multi coloured lens (2) that is mounted on top of a battery housing (3) with one or two (optional) on / off switches enabling the user to choose flashing or non flashing lights or both simultaneously (4) The battery housing is attached to, or is an integral moulded part of, a flexible head band (5). The lens, battery housing & switch are waterproofed using O-rings or other seals (6) A miniature circuit board is housed in the lens base if light emitting diodes are used (7).

Figure 4 Version D

Light bulbs or light emitting diodes supplying continuous or flashing light or both simultaneously (1) are encased in a clear, coloured or multi coloured lens (2) which is attached to a base that is an integral moulded part of a flexible head band (5). This is connected to an external remote battery housing switch assembly with one or two (optional) switches enabling the user to choose flashing or non flashing lights or both simultaneously (3) by wiring (8). A clip (7) enables the user to attach to an item of clothing or other suitable area. The lens, battery housing and switch are waterproofed using O-ring or other seals (6) a miniature circuit board is housed in the lens base if light emitting (7).

CLAIMS

DINGHY HEAD LIGHT

- 1) The dingy head light provides light for the prevention of collision whilst upon the water . That , when worn upon the head provides light with uninterrupted visibility 360 degrees around the user and his craft .
- 2) A lighting device as in claim 1 , that does not interfere with the night vision of the user or their means of propulsion .
- 3) A lighting device as in claim 1 and 2 that is light-weight and completely portable and waterproof .
- 4) A lighting device as in claim 1 , 2 and 3 that is powered by a battery or batteries built into the device next to the bulb or powered by an external power battery pack or both.
see Fig 1 & Fig 2
- 5) A lighting device as in claims 1 , 2 , 3 and 4 utilising any clear or coloured lens , a multi colour lens or a combination of interchangeable lenses .
- 6) A lighting device as in claims 1 , 2 , 3 , 4 & 5 either shining continuously or flashing or both simultainusly .
- 7) A lighting device as in claims 1 , 2 , 3 , 4 , 5 and 6 that in conditions of darkness , lets other people know where the person wearing the device is .



Application No: GB 9922149.1
Claims searched: 1-7

Examiner: Colin Clarke
Date of search: 3 December 1999

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.Q): F4R

Int Cl (Ed.6): A42B 1/24, F21L

Other: WPI, EPODOC, JAPIO

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 0582547 BRITISH THOMSON-HOUSTON see whole document esp.pl lines 84-94	1-7
X	US 4665568 STUTES see figs	1,2,4,7
X	US 3963917 PESKA see figs & column 3 lines 34-64	1-7
X	US 3749902 DREW see whole document	1-7
X	Derwent Abstract 1999-090330 & JP100325011 A DAINIPPON	1 at least
X	Derwent Abstract 1999-211315 & JP110050322 A AKAOKA	1 at least

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.
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A Document indicating technological background and/or state of the art.
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